

## Attribute lookup tables (LUTs) for the *Forests of Australia (2023)* dataset

### Dataset attributes (Value Attribute Table or VAT)

Field	Field Type	Description
VALUE	Numeric	Identifier of every unique combination of the following attributes: STATE, FOR_SOURCE, FOR_CODE, FOR_TYPE, FOR_CAT, HEIGHT and COVER.
COUNT	Numeric	Number of cells that belong to a particular VALUE. For this particular dataset, in which cell resolution is 100 by 100 metres. The COUNT value is equivalent to area in hectares.
FOR_CATEGORY	Text	NFI forest category description. Valid values are: Non-forest; Native forest; Commercial plantation and Other forest.
FOR_TYPE	Text	NFI forest type name – broad name defined by dominant species and formation or structure.
FOR_CODE	Numeric	Code linking the NFI forest type name (FOR_TYPE) to a COVER class and HEIGHT class. Each unique combination of the three attributes gives a forest formation value. The FOR_CODE.LUT below documents each code.
COVER_CODE	Numeric	Code linking an NFI forest type to a crown cover class. The COVER.LUT table below describes each code and value.
HT_CODE	Numeric	Code linking an NFI forest type to a height category – see HEIGHT.LUT table below describes each code and value.
STATE	Text	State or territory in which the cell occurs.
FOREST	Numeric	Binary field where: Value of 0 indicates <b>non-forest</b> and Value 1 indicates <b>forest</b> .
FOR_SOURCE	Text	Information about the source of the data for decision on: <ul style="list-style-type: none"> <li>- whether to classify as forest or non-forest,</li> <li>- NFI forest type</li> <li>- whether land use is appropriate for forest allocation</li> </ul> See table FOR_SOURCE.LUT below for explanation of values available or used in the dataset.

### FOR\_CODE.LUT (Forest Code lookup-table)

Forest code (FOR_CODE)	NFI Forest type (FOR_TYPE)	NFI Forest category (FOR_CAT)	Forest Formation
0	Non forest	Non forest	Non forest
1	Acacia	Native forest	Acacia Low Woodland
2	Acacia	Native forest	Acacia Medium Woodland
3	Acacia	Native forest	Acacia Tall Woodland
4	Acacia	Native forest	Acacia Low Open
5	Acacia	Native forest	Acacia Medium Open
6	Acacia	Native forest	Acacia Tall Open
7	Acacia	Native forest	Acacia Low Closed
8	Acacia	Native forest	Acacia Medium Closed
9	Acacia	Native forest	Acacia Tall Closed
10	Other native forest	Native forest	Banksia Low Woodland
11	Other native forest	Native forest	Banksia Medium Woodland
12	Other native forest	Native forest	Banksia Low Open

<b>Forest code (FOR_CODE)</b>	<b>NFI Forest type (FOR_TYPE)</b>	<b>NFI Forest category (FOR_CAT)</b>	<b>Forest Formation</b>
13	Other native forest	Native forest	Banksia Medium Open
14	Other native forest	Native forest	Banksia Low Closed
15	Other native forest	Native forest	Banksia Medium Closed
16	Callitris	Native forest	Callitris Low Woodland
17	Callitris	Native forest	Callitris Medium Woodland
18	Callitris	Native forest	Callitris Tall Woodland
19	Callitris	Native forest	Callitris Low Open
20	Callitris	Native forest	Callitris Medium Open
21	Callitris	Native forest	Callitris Tall Open
22	Callitris	Native forest	Callitris Low Closed
23	Callitris	Native forest	Callitris Medium Closed
24	Callitris	Native forest	Callitris Tall Closed
25	Casuarina	Native forest	Casuarina Low Woodland
26	Casuarina	Native forest	Casuarina Low Open
27	Casuarina	Native forest	Casuarina Low Closed
28	Casuarina	Native forest	Casuarina Medium Woodland
29	Casuarina	Native forest	Casuarina Medium Open
30	Casuarina	Native forest	Casuarina Medium Closed
31	Casuarina	Native forest	Casuarina Tall Woodland
32	Casuarina	Native forest	Casuarina Tall Open
33	Casuarina	Native forest	Casuarina Tall Closed
34	Eucalypt Mallee Woodland	Native forest	Eucalypt Mallee Low Woodland
35	Eucalypt Mallee Woodland	Native forest	Eucalypt Mallee Medium Woodland
36	Eucalypt Mallee Woodland	Native forest	Eucalypt Mallee Tall Woodland
37	Eucalypt Mallee Open	Native forest	Eucalypt Mallee Low Open
38	Eucalypt Mallee Open	Native forest	Eucalypt Mallee Medium Open
39	Eucalypt Mallee Open	Native forest	Eucalypt Mallee Tall Open
40	Eucalypt Low Woodland	Native forest	Eucalypt Low Woodland
41	Eucalypt Medium Woodland	Native forest	Eucalypt Medium Woodland
42	Eucalypt Tall Woodland	Native forest	Eucalypt Tall Woodland
43	Eucalypt Low Open	Native forest	Eucalypt Low Open
44	Eucalypt Medium Open	Native forest	Eucalypt Medium Open
45	Eucalypt Tall Open	Native forest	Eucalypt Tall Open
46	Eucalypt Low Closed	Native forest	Eucalypt Low Closed
47	Eucalypt Medium Closed	Native forest	Eucalypt Medium Closed
48	Eucalypt Tall Closed	Native forest	Eucalypt Tall Closed
49	Other native forest	Native forest	Leptospermum Low Woodland
50	Other native forest	Native forest	Leptospermum Medium Woodland
51	Other native forest	Native forest	Leptospermum Tall Woodland
52	Other native forest	Native forest	Leptospermum Low Open
53	Other native forest	Native forest	Leptospermum Medium Open
54	Other native forest	Native forest	Leptospermum Tall Open
55	Other native forest	Native forest	Leptospermum Low Closed
56	Other native forest	Native forest	Leptospermum Medium Closed
57	Other native forest	Native forest	Leptospermum Tall Closed

<b>Forest code (FOR_CODE)</b>	<b>NFI Forest type (FOR_TYPE)</b>	<b>NFI Forest category (FOR_CAT)</b>	<b>Forest Formation</b>
58	Mangrove	Native forest	Mangrove Low Woodland
59	Mangrove	Native forest	Mangrove Low Open
60	Mangrove	Native forest	Mangrove Low Closed
61	Mangrove	Native forest	Mangrove Medium Woodland
62	Mangrove	Native forest	Mangrove Medium Open
63	Mangrove	Native forest	Mangrove Medium Closed
64	Melaleuca	Native forest	Melaleuca Low Woodland
65	Melaleuca	Native forest	Melaleuca Low Open
66	Melaleuca	Native forest	Melaleuca Low Closed
67	Melaleuca	Native forest	Melaleuca Medium Woodland
68	Melaleuca	Native forest	Melaleuca Medium Open
69	Melaleuca	Native forest	Melaleuca Medium Closed
70	Melaleuca	Native forest	Melaleuca Tall Woodland
71	Melaleuca	Native forest	Melaleuca Tall Open
72	Melaleuca	Native forest	Melaleuca Tall Closed
73	Other native forest	Native forest	Mixed Low Woodland
74	Other native forest	Native forest	Mixed Low Open
75	Other native forest	Native forest	Mixed Low Closed
76	Other native forest	Native forest	Mixed Medium Woodland
77	Other native forest	Native forest	Mixed Medium Open
78	Other native forest	Native forest	Mixed Medium Closed
79	Other native forest	Native forest	Mixed Tall Woodland
80	Other native forest	Native forest	Mixed Tall Open
81	Other native forest	Native forest	Mixed Tall Closed
82	Other native forest	Native forest	Other Low Woodland
83	Other native forest	Native forest	Other Low Open
84	Other native forest	Native forest	Other Low Closed
85	Other native forest	Native forest	Other Medium Woodland
86	Other native forest	Native forest	Other Medium Open
87	Other native forest	Native forest	Other Medium Closed
88	Other native forest	Native forest	Other Tall Woodland
89	Other native forest	Native forest	Other Tall Open
90	Other native forest	Native forest	Other Tall Closed
91	Hardwood plantation	Commercial plantation	Plantation Hardwood
92	Softwood plantation	Commercial plantation	Plantation Softwood
93	Mixed species plantation	Commercial plantation	Plantation Mixed
94	Unknown species plantation	Commercial plantation	Plantation Unknown
95	Rainforest	Native forest	Rainforest Low Open
96	Rainforest	Native forest	Rainforest Low Closed
97	Rainforest	Native forest	Rainforest Medium Open
98	Rainforest	Native forest	Rainforest Medium Closed
99	Rainforest	Native forest	Rainforest Tall Open
100	Rainforest	Native forest	Rainforest Tall Closed
101	Other native forest	Native forest	Unknown native forest

Forest code (FOR_CODE)	NFI Forest type (FOR_TYPE)	NFI Forest category (FOR_CAT)	Forest Formation
102	Other forest <sup>1</sup>	Other forest	Other forest <sup>1</sup>

**FOR\_SOURCE.LUT** (Forest Type Source lookup table)

FOR_SOURCE	Description
BLANK	Non-forest
CLUM	Areas not suitable to be mapped as forest owing to their land use type as determined from the Catchment scale land use of Australia (CLUM) dataset (2020). Examples of such land use areas include: cropping, horticulture, irrigation, residential, industrial and utilities.
Aus_For18	Areas determined by the Multiple Lines of Evidence method to be forest and the Forests of Australia (2018) dataset was used to allocate NFI forest types.
NT_CLUM	Areas of sandalwood in Northern Territory as determined from the Land Use Mapping Project of the Northern Territory, 2016 - 2022 (LUMP).
Global Mangroves	Areas determined by the Multiple Lines of Evidence method to be forest and forest type was determined from the Global Mangrove Watch (2018) dataset.
NPI spatial	Commercial plantation forest areas identified by the National Plantation Inventory (2021) spatial dataset.
NVIS 6.0	Areas determined by the Multiple Lines of Evidence method to be forest and the National Vegetation Information System 6.0 dataset (Level 5, Level 6, MVG and MVS attributes) was used to allocate NFI forest types.
Tas Forest Comms	Areas determined by the Multiple Lines of Evidence method to be forest and the Tasmania Forest Communities with NVIS Groups 2020 dataset was used to allocated NFI forest types.

**HEIGHT.LUT** (Forest height lookup table)

HEIGHT code	Forest height class (metres)	Description
1	2-10	Low
2	>10-30	Medium
3	>30	Tall
4	n/a	Plantation
5	≥ 2	Unknown
6		Non Forest

n/a, not applicable

**COVER.LUT** (Forest crown cover lookup table)

COVER code	Forest crown cover	Description
1	20-50%	Woodland
2	>50-80%	Open
3	>80%	Closed
4	n/a	Plantation
5	≥20%	Unknown
6	<20%	Non Forest

n/a, not applicable

<sup>1</sup> May include planted forests not deemed commercially viable, sandalwood plantations and environmental plantings.

## Further Reading

ABARES 2021, *Catchment scale land use of Australia – Update December 2020*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, February, CC BY 4.0, DOI: [10.25814/aqjw-rq15](https://doi.org/10.25814/aqjw-rq15)

Mutendeudzi M, Read S, Howell C, Davey S & Clancy T 2013b). *A 'Multiple Lines of Evidence' approach to Australia's forest cover estimate*. In: *Managing our Forests into the 21st Century*, Proceedings of the Institute of Foresters of Australia Conference, Canberra, 7–11 April 2013, Institute of Foresters of Australia, Canberra

NVIS Technical Working Group (2017) *Australian Vegetation Attribute Manual: National Vegetation Information System, Version 7.0*. Department of the Environment and Energy, Canberra. Prep by Bolton, M.P., deLacey, C. & Bossard, K.B. (Eds)

Bunting P, Rosenqvist A, Lucas R, Rebelo L-M, Hilarides L, Thomas N, Hardy A, Itoh T, Shimada M & Finlayson CM 2018, *The Global Mangrove Watch – a New 2010 Global Baseline of Mangrove Extent*. *Remote Sensing* 10(10): 1669. [doi.org/10.3390/rs10101669](https://doi.org/10.3390/rs10101669)